

General

Title

Emergency department (ED)-throughput: median time from ED arrival to provider contact for ED patients.

Source(s)

Centers for Medicare and Medicaid Services (CMS). Hospital outpatient quality reporting specifications manual, version 11.0. Baltimore (MD): Centers for Medicare and Medicaid Services (CMS); Effective 2018 Jan. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the median time (in minutes) from emergency department (ED) arrival to provider contact for ED patients.

Rationale

Reducing the time patients remain in the emergency department (ED) can improve access to treatment and increase quality of care. Reducing this time potentially improves access to care specific to the patient condition and increases the capability to provide additional treatment. In recent times, EDs have experienced significant overcrowding. Although once only a problem in large, urban, teaching hospitals, the phenomenon has spread to other suburban and rural healthcare organizations. According to a 2002 national United States (U.S.) survey, more than 90 percent of large hospitals report EDs operating "at" or "over" capacity. Overcrowding and heavy emergency resource demand have led to a number of problems, including ambulance refusals, prolonged patient waiting times, increased suffering for those who wait, rushed and unpleasant treatment environments, and potentially poor patient outcomes. Approximately

one third of hospitals in the U.S. report increases in ambulance diversion in a given year, whereas up to half report crowded conditions in the ED. In a recent national survey, 40 percent of hospital leaders viewed ED crowding as a symptom of workforce shortages. ED crowding may result in delays in the administration of medication such as antibiotics for pneumonia and has been associated with perceptions of compromised emergency care. For patients with non-ST-segment-elevation myocardial infarction, long ED stays were associated with decreased use of guideline-recommended therapies and a higher risk of recurrent myocardial infarction. When EDs are overwhelmed, their ability to respond to community emergencies and disasters may be compromised.

Evidence for Rationale

Centers for Medicare and Medicaid Services (CMS). Hospital outpatient quality reporting specifications manual, version 11.0. Baltimore (MD): Centers for Medicare and Medicaid Services (CMS); Effective 2018 Jan. various p.

Derlet RW, Richards JR. Emergency department overcrowding in Florida, New York, and Texas. *South Med J*. 2002 Aug;95(8):846-9. [PubMed](#)

Derlet RW, Richards JR. Overcrowding in the nation's emergency departments: complex causes and disturbing effects. *Ann Emerg Med*. 2000 Jan;35(1):63-8. [26 references] [PubMed](#)

Diercks DB, Roe MT, Chen AY, Peacock WF, Kirk JD, Pollack CV Jr, Gibler WB, Smith SC Jr, Ohman M, Peterson ED. Prolonged emergency department stays of non-ST-segment-elevation myocardial infarction patients are associated with worse adherence to the American College of Cardiology/American Heart Association guidelines for management and increased adverse events. *Ann Emerg Med*. 2007;50(5):489-96. [PubMed](#)

Fatovich DM, Hirsch RL. Entry overload, emergency department overcrowding, and ambulance bypass. *Emerg Med J*. 2003 Sep;20(5):406-9. [PubMed](#)

Hwang U, Richardson LD, Sonuyi TO, Morrison RS. The effect of emergency department crowding on the management of pain in older adults with hip fracture. *J Am Geriatr Soc*. 2006 Feb;54(2):270-5. [PubMed](#)

Institute of Medicine of the National Academies. Future of emergency care: hospital-based emergency care at the breaking point. The National Academies Press; 2006.

Kyriacou DN, Ricketts V, Dyne PL, McCollough MD, Talan DA. A 5-year time study analysis of emergency department patient care efficiency. *Ann Emerg Med*. 1999 Sep;34(3):326-35. [PubMed](#)

Pines JM, Garson C, Baxt WG, Rhodes KV, Shofer FS, Hollander JE. ED crowding is associated with variable perceptions of care compromise. *Acad Emerg Med*. 2007 Dec;14(12):1176-81. [PubMed](#)

Pines JM, Hollander JE. Emergency department crowding is associated with poor care for patients with severe pain. *Ann Emerg Med*. 2008 Jan;51(1):6-7. [PubMed](#)

Schull MJ, Vermeulen M, Slaughter G, Morrison L, Daly P. Emergency department crowding and thrombolysis delays in acute myocardial infarction. *Ann Emerg Med*. 2004 Dec;44(6):577-85. [PubMed](#)

Siegel B, Wilson MJ, Sickler D. Enhancing work flow to reduce crowding. *Jt Comm J Qual Patient Saf*. 2007 Nov;33(11 Suppl):57-67. [PubMed](#)

Trzeciak S, Rivers EP. Emergency department overcrowding in the United States: an emerging threat to patient safety and public health. *Emerg Med J.* 2003 Sep;20(5):402-5. [46 references] [PubMed](#)

Wilper AP, Woolhandler S, Lasser KE, McCormick D, Cutrona SL, Bor DH, Himmelstein DU. Waits to see an emergency department physician: U.S. trends and predictors, 1997-2004. *Health Aff (Millwood)*. 2008 Mar-Apr;27(2):w84-95. [PubMed](#)

Primary Health Components

Emergency department (ED) throughput; provider contact

Denominator Description

Any emergency department (ED) patient from the facility's ED (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Continuous variable statement: Time (in minutes) from emergency department (ED) arrival to provider contact for patients discharged from the ED

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

This measure is being collected by hospitals paid under the Outpatient Prospective Payment System; about 4,000 hospitals across the nation. The measure has been collected since January 1, 2012.

Evidence for Extent of Measure Testing

Larbi F. Personal communication: CMS hospital outpatient department quality measures. 2014 Jul 24.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Emergency Department

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

All ages

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Timeliness

Data Collection for the Measure

Case Finding Period

Encounter dates: January 1 through December 31

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Encounter

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Any emergency department (ED) patient from the facility's ED

Exclusions

Patients who expired in the ED

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Continuous variable statement: Time (in minutes) from emergency department (ED) arrival to provider contact for patients discharged from the ED

Exclusions

None

Numerator Search Strategy

Encounter

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

- An electronic data collection tool is made available from vendors or facilities can download the free CART tool. Paper tools for manual abstraction are also available for the CART tool. These tools are posted on the [QualityNet Web site](#) .
- Emergency Department (ED) Throughput Hospital Outpatient Population Algorithm: OP-18 and OP-20
- Algorithm Narrative for OP-18 and OP-20: ED Throughput Hospital Outpatient Population
- OP-20: Door to Diagnostic Evaluation by a Qualified Medical Professional Algorithm
- Algorithm Narrative for OP-20: Door to Diagnostic Evaluation by a Qualified Medical Professional

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Mean/Median

Interpretation of Score

Desired value is a lower score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

OP-20: hospital outpatient ED-throughput: door to diagnostic evaluation by a qualified medical professional.

Measure Collection Name

Hospital Outpatient Quality Measures

Measure Set Name

Emergency Department (ED)-Throughput

Submitter

Centers for Medicare & Medicaid Services - Federal Government Agency [U.S.]

Developer

Centers for Medicare & Medicaid Services - Federal Government Agency [U.S.]

Funding Source(s)

United States Department of Health and Human Services

Composition of the Group that Developed the Measure

The measure was developed by the Centers for Medicare & Medicaid Services (CMS) Contractor at the time, the Oklahoma Foundation for Medical Quality Contractor. The measure continues to be maintained by CMS and its current measure maintenance contractor, Mathematica Policy Research, in conjunction with a multi-disciplinary Technical Expert Panel.

Financial Disclosures/Other Potential Conflicts of Interest

None

Measure Initiative(s)

Hospital Compare

Hospital Outpatient Quality Reporting Program

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2018 Jan

Measure Maintenance

Twice yearly

Date of Next Anticipated Revision

None

Measure Status

This is the current release of the measure.

This measure updates a previous version: Centers for Medicare and Medicaid Services (CMS). Hospital outpatient quality reporting specifications manual, version 9.0a. Baltimore (MD): Centers for Medicare and Medicaid Services (CMS); Effective 2016 Jan 1. various p.

Measure Availability

Source available from the [QualityNet Web site](#) .

Check the QualityNet Web site regularly for the most recent version of the specifications manual and for the applicable dates of discharge.

NQMC Status

This NQMC summary was completed by ECRI Institute on May 7, 2014. The information was verified by the measure developer on July 3, 2014.

This NQMC summary was updated by ECRI Institute on December 22, 2015. The information was verified by the measure developer on January 28, 2016.

This NQMC summary was updated again by ECRI Institute on January 16, 2018. The information was verified by the measure developer on February 7, 2018.

Copyright Statement

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The Hospital Outpatient Quality Reporting Specifications Manual is periodically updated by the Centers for Medicare & Medicaid Services. Users of the Hospital OQR Specifications Manual must update their software and associated documentation based on the published manual production timelines.

Production

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